

Certificate of Analysis

Product	Hydrochloric Acid 32%	Batch No.	: 21 05 0102
Grade	RCI Premium	Manufacturing date	: 14/05/2021
Code No.	RP1104	Best before	: 05/2023

Items	Descriptions	Specifications		Test Results
1	Assay (by acidimetry)	32%	min.	32.9% (w/w)
2	Appearance of solution	Passes test		Passes test
3	Color (APHA)	10	max.	< 10
4	Residue after ignition	0.0003%	max.	< 0.0003%
5	Extractable Organic Substance	0.0005%	max.	< 0.0005%
6	Free Chlorine (as Cl)	0.0001%	max.	< 0.0001%
7	Ammonium (NH ₄)	0.0001%	max.	< 0.0001%
8	Bromide (Br)	0.001%	max.	< 0.001%
9	Phosphate (PO ₄)	0.00005%	max.	< 0.00005%
10	Sulfate (SO ₄)	0.00005%	max.	< 0.00005%
11	Sulfite (SO ₃)	0.00008%	max.	< 0.00008%
12	Aluminium (Al)	0.00001%	max.	< 0.00001%
13	Heavy metals (as Pb)	0.00001%	max.	< 0.00001%
14	Arsenic and Antimony (as As)	0.0000005%	max.	< 0.0000005%
15	Barium (Ba)	0.00002%	max.	< 0.00002%
16	Boron (B)	0.000005%	max.	< 0.000005%
17	Cadmium (Cd)	0.000001%	max.	< 0.000001%
18	Calcium (Ca)	0.00003%	max.	< 0.00003%
19	Chromium (Cr)	0.00001%	max.	< 0.00001%
20	Cobalt (Co)	0.000001%	max.	< 0.000001%
21	Copper (Cu)	0.000002%	max.	< 0.000002%
22	Gold (Au)	0.00001%	max.	< 0.00001%
23	Iron (Fe)	0.00001%	max.	< 0.00001%
24	Lead (Pb)	0.000001%	max.	< 0.000001%
25	Magnesium (Mg)	0.00003%	max.	< 0.00003%
26	Manganese (Mn)	0.000002%	max.	< 0.000002%
27	Mercury (Hg)	0.0000005%	max.	< 0.0000005%
28	Molybdenum (Mo)	0.000002%	max.	< 0.000002%
29	Nickel (Ni)	0.000005%	max.	< 0.000005%
30	Potassium (K)	0.00003%	max.	< 0.00003%
31	Sodium (Na)	0.00003%	max.	< 0.00003%
32	Strontium (Sr)	0.000002%	max.	< 0.000002%
33	Tin (Sn)	0.00003%	max.	< 0.00003%
34	Titanium (Ti)	0.00001%	max.	< 0.00001%
35	Zinc (Zn)	0.000002%	max.	< 0.000002%

This is to certify the above batch has been tested and complies with this specification.

Ladaphan

Chemist

Achan

Technical Manager